

REMARKS

In the Office Action mailed September 26, 2008, claims 1-42 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent App. Pub. 2004/0047477 A1 ("Bank"). Claims 1-42 were also rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-46 of over U.S. Patent No. 6,726,626 ("Hossack").

Rejection under 35 U.S.C. § 103(a)

Independent claim 1 recites, *inter alia*, identifying the transducer circuit having an ultrasonic transducer that includes at least one reactance characteristic and an operating frequency range, and at least one signal path that is electrically coupled to the ultrasonic transducer, the at least one signal path including a receive signal path.

Bank does not disclose or suggest identifying the transducer circuit having an ultrasonic transducer that includes at least one reactance characteristic and an operating frequency range, and at least one signal path that is electrically coupled to the ultrasonic transducer, the at least one signal path including a receive signal path. Instead, Bank teaches power delivery systems for parametric loudspeakers. (para. [0001]). Bank does not teach any circuit with a receive signal path.

The Office Action cites to paragraphs [0002] and [0087] of Bank for "reception" or "receive signals." Paragraph [0002] discusses production and modulation of an ultrasonic carrier frequency with an audio input signal to generate an audible reproduction of the audio input signal. Paragraph [0087] teaches isolation of an AC power line from a load circuit. These paragraphs teach *generation* of an audio signal and *isolation* of a power line, not a *receive* signal path that is electrically coupled to the ultrasonic transducer, as recited in the claim.

One of ordinary skill in the art would not have electrically coupled a receive signal path to an ultrasonic transducer in view of Bank because Bank is directed to *loudspeaker* technology, and thus audio signal *generation*, not reception.

A similar argument as presented above with respect to claim 1 also applies to independent claims 16, 31, 33, 35 and 39.

Independent **claim 31** also recites, *inter alia*, isolating the negative capacitor from the ultrasonic transducer during a transmission of the transducer circuit using a plurality of switches.

Bank does not disclose or suggest isolating the negative capacitor from the ultrasonic transducer during a transmission of the transducer circuit using a plurality of switches. Instead, Bank teaches four switching power devices 120a-120d in a Class D amplifier with an H-bridge amplifier. (para. [0002]). The four switching power devices 120a-120d switch *power* received from a DC power source line 122 to create a pulse width modulated AC signal with a particular frequency (i.e. the "switching frequency"). (see, e.g., paras. [0051]-[0057]). The switching power devices do not *isolate* the negative capacitor from the ultrasonic transducer during a transmission of the transducer circuit, as recited in the claim.

One of ordinary skill in the art would not have isolated a negative capacitor from an ultrasonic transducer during a transmission of a transducer circuit using a plurality of switches in view of Bank because Bank is directed to improving power efficiency in a parametric loudspeaker system, and isolating a negative capacitor from Bank's transducer would decrease power efficiency by removing the counterbalancing reactive load.

A similar argument as presented above with respect to claim 31 also applies to independent **claim 33**.

Dependent **claims 2-15, 17-30, 32, 34, 36-38 and 40-42** each depend from one of the above independent claims and are allowable for at least the same reasons as their respective base claim. Further features patentably distinguish from Bank. Examples are provided below.

Claims 8, 11, 23 and 26 recite features that fall under the second argument for claim 31 above.

Nonstatutory Obviousness-Type Double Patenting Rejection

The Assignee shall address the nonstatutory obviousness-type double patenting rejection, such as by filing an appropriate terminal disclaimer, should the Examiner indicate any allowable subject matter in the claims.

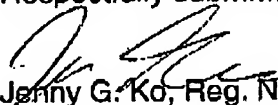
CONCLUSION

Applicant respectfully submits that all of the pending claims are in condition for allowance and seeks early allowance thereof. If for any reason, the Examiner is unable to allow the application but believes that an interview would be helpful to resolve any issues, he is respectfully requested to call Craig Summerfield at (312) 321-4726.

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